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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|------------------------|---------------------|------------------|
| 09/645,376 | 08/24/2000 | Michael Scott Probasco | NC13977 | 3555 |

7590 09/01/2004

Nokia Inc
6000 Connection Drive 1-4-755
Irving, TX 75039

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| EXAMINER |
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CALLAHAN, PAUL E

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| ART UNIT | PAPER NUMBER |
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2137

DATE MAILED: 09/01/2004

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Please find below and/or attached an Office communication concerning this application or proceeding.

SP

Office Action Summary

Application No.

09/645,376

Applicant(s)

PROBASCO, MICHAEL SCOTT

Examiner

Paul Callahan

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 24 August 2000.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-12 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-12 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date <u>2</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. Claims 1-12 are pending in this application and have been examined.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claim 2 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The claim contains the passage: "wherein the key is a plurality of different keys. It is not clear whether the applicant intends this to mean the key is formed from the combination of a plurality of keys, or if the key may take on the value of any one of a plurality of different keys.

Claim 3 is dependent on claim 2 and is therefore rejected on the same basis as that claim. In addition, claim 3 contains the passage: "associated a category" It is not clear what the applicant means by category in this context.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

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(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

5. Claims 1, 2, 4-6, and 8-12 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by Wasilewski et al. US 5,870,474.

As for claims 1, 6, 8, and 11, Wasilewski teaches a method and means for carrying out the method for sending secure messages in a broadcast network (abstract) comprising the steps of: encrypting data with a key (col. 3 lines 43-67); hashing said key (col. 4 lines 1-25), combining said encrypted data and said key in a broadcast message (col. 3 lines 43-67), and transmitting said broadcast message to a plurality of receiving nodes (abstract).

As for claim 2, Wasilewski teaches a plurality of keys (col. 3 lines 43-67), and a combining step that comprises combining said encrypted data with each one of said plurality of different keys in a plurality of broadcast messages (abstract, col. 4 lines 1-25), and transmitting one of the plurality of broadcast messages to a subset of said plurality of receiving nodes (abstract).

As for claims 4, 9, and 10, Wasilewski teaches a method and means for carrying out the method for decrypting a message received over a broadcast network (abstract) comprising the steps of: receiving data comprising an encrypted message and a hashed key at a node in said broadcast network (abstract) where said node comprises means for storing data (fig. 1 items 90a – 90n “Customers STU’s”); parsing said data to derive said encrypted message and said hashed key (col. 11 lines 24-30); comparing said received hashed key with a plurality of keys stored in said means for storing data in said node and to

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select a key matching said received hashed key and decrypting said encrypted message with said matching key if a match is found (col. 11 lines 24-67).

As for claim 5, Wasilewski teaches requesting a key from a network entity in col. 11 lines 48-50.

As for claim 12, Wasilewski teaches a tangible medium that is a hard disk or the like (fig. 11 item 196).

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Wasilewski as applied to claim 5 above, and Official Notice.

Wasilewski teaches all of the limitations of claim 5 upon which claim 7 is dependent but doesn't teach a network entity that distributes hashed keys as per claim 7. Official Notice may be taken however that such a feature is old and well known in the art of cryptographic communications. Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to have incorporated this feature into the system of Wasilewski. It would have been desirable to do so as to increase the security of key distribution. Wasilewski

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discusses the advantage of making this combination at for example col. 4 lines 1-25 where the desirability of transmitting keys in hashed form is explained.

Conclusion

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The following US Patent documents teach secure broadcast systems similar to the Applicant's:

| | |
|-------------------|-----------|
| Pastor | 5,073,935 |
| Cohen et al. | 5,282,249 |
| Banker et al. | 6,005,938 |
| Pinder et al. | 6,105,134 |
| Pinder et al. | 6,424,717 |
| Atkins III et al. | 6,526,508 |

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Paul E. Callahan whose telephone number is (703) 305-1336. The examiner can normally be reached on M-F from 9 to 5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Greg Morse, can be reached on (703) 308-4789. The fax phone number for the organization where this application or proceeding is assigned is: (703) 872-9306. Any inquiry of a general nature or relating to the

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status of this application or proceeding should be directed to the receptionist
whose telephone number is (703) 305-3900.

8/27/04

Paul G. Hall